

ISMS ASSESSMENT FORM WORKER INJURIES

Objective: Assess the laboratory's process for understanding the causes and development of effective corrective actions for incidents which have resulted in worker injuries or illnesses. Review the roles and responsibilities of line managers, support personnel and workers who are involved in the incident as well as the adequacy of the investigation, development of corrective actions of such incidents, and the verification of their effectiveness. Review line management's understanding of the Laboratory's and division/department policies and procedures for working safely. Assess the Laboratory's process and implementation of identification and analysis of hazards, establishment of work controls including work planning, procedural adherence, and implementation of lessons learned both from previous work and current work activities.

1. **Line Management Responsibility for Safety**

Guiding Principle #1: *"Line Management Is Directly Responsible for the Protection of the Public, Workers, and the Environment."*

a. **Criterion 1: Policy and Expectations**

Safety policies and goals are documented, and initiatives are in progress to improve worker health and safety. Review Laboratory-wide and sample program/division initiatives. Assess the adequacy of documented BSA management expectations in policies specific to worker injury response, analysis, and prevention. Review BSA performance goals for managers, employees and divisions. Conduct interviews with department/division personnel about set performance goals.

b. **Criterion 2: Leadership**

Line management demonstrates a commitment to protect the public and workers. Line management proactively demonstrates a leadership position in guiding their line organizations, subcontractors, and workers toward integrated safety management. Review Laboratory-wide and sample program/division performance metrics and conduct interviews of senior and middle managers. Determine what, if any, specific actions (and their drivers) were taken by line management related to worker injuries. Review Departmental "Safety Improvement Plans" for actions related to worker injury programs.

c. **Criterion 3: Worker Empowerment**

Contractor line managers recognize that active participation by workers is essential to maintain and improve protection of the public and workers. Conduct interviews of middle management and workers to ascertain level of participation to work planning and evaluation of events to improve performance. Review documents and interview personnel to ascertain the mechanism for workers to easily provide information to management; interview workers to determine their understanding of these mechanisms.

2. **Clear Roles and Responsibilities**

Guiding Principle #2: *"Clear Lines of Authority and Responsibility for Ensuring Safety Shall Be Established and Maintained at All Organizational Levels Within the Department and Its Contractors."*

a. **Criterion 1: Clear Lines of Authority and Responsibilities**

**ISMS ASSESSMENT FORM
WORKER INJURIES**

Line management defined, documents and maintains clearly delineated roles and responsibilities for worker health and safety that provide a foundation for effectively integrating safety into site wide operations. Interview work managers/supervisors and workers to determine their understanding of their authorities and responsibilities for performing work safety. Review BSA documents for inclusion of specific staff and division requirements related to workplace injuries (evaluation, prevention, etc.). Interview personnel to determine the adequacy and understanding of their R2A2s regarding BSA safety goals and the communication to staff.

b. Criterion 2: Defined Responsibilities and Accountability

Line managers are responsible and accountable for ensuring that DOE facility operations and work practices are performed in a manner that adequately protects the public, workers, and the environment. Review roles, responsibilities and authorities and accountabilities (R2A2s) of senior managers, middle managers, foremen, and workers regarding safety and then select individuals of organizations that have had worker illnesses and injuries for interviews

c. Criterion 3: Accountability for Performance

Line managers are accountable for safety performance through performance objectives and appraisal systems. Performance is explicitly tracked and measured, and inadequate performance should have visible and meaningful consequences. Line managers execute actions to attain and continuously improve the safety of their operations. Conduct interviews with Human Resources, line managers and supervisors on accountability for performance. Review the process and conduct selected interviews on how the information is fed back to BSA management. Assess whether the information is being effectively used by management to improve overall performance.

3. Competence Commensurate with Responsibilities

Guiding Principle #3: *"Personnel Shall Possess the Experience, Knowledge, Skills, and Abilities That Are Necessary To Discharge Their Responsibilities."*

a. Criterion 1: Staffing and Qualifications

Line managers and staff demonstrate a high degree of technical competence and a good understanding of programs and facilities. Review SBMS and R2A2s as appropriate for select positions (ESH Managers, work supervisors, critique leaders & investigators). Conduct interviews with senior managers, facility managers, principal investigators, building managers, as appropriate. Perform a sampling of training records. Review incidents reports to determine whether staffing and/or qualification were causal factors in worker injuries.

b. Criterion 2: Technical Competence

Workers and managers are technically competent to perform jobs and are appropriately educated and knowledgeable of hazards, vulnerabilities, and risks. Review training records and JTAs for personnel performing hazardous work. Conduct interviews with senior managers, facility managers, principal investigators, building managers, as appropriate. Review incidents reports to determine whether technical competence was a causal factor in worker injuries.

ISMS ASSESSMENT FORM WORKER INJURIES

Review training records of personnel who have performed incident investigations.
Assess the adequacy of the accident investigator training.

4. **Define the Scope of Work and Balanced Priorities**

Guiding Principle #4: *"Resources Shall be Effectively Allocated To Address Safety, Programmatic, and Operational Considerations. Protecting the Public, the Workers, and the Environment Shall Be a Priority Whenever Activities Are Planned and Performed."*

Core Function #1: *"Missions are Translated Into Work, Expectations are Set, Tasks Identified and Prioritized, and Resources are Allocated."*

a. **Criterion 1: Translate Mission into Work; Set Expectations**

Contractors use defined mechanisms to define the scope, schedule and cost of work and to identify and communicate associated risks and hazards. Review the work processes and compare expectations in SBMS and division/department procedures for conformance as well as recent events.

b. **Criterion 2: Provide for Integration**

ES&H functions and activities are integrated into program, activity, and work planning at all levels of the line organization. Review SBMS and division/department procedures that demonstrate that ISM is integrated into activities. Conduct interviews of a cross-cut of personnel for their level of understanding. Assess whether job planners/supervisors/foremen are integrating the appropriate safety staff into the work planning process. Select current work activities and determine level of ESH involvement in job review and planning.

c. **Criterion 3: Project Prioritization and Resource Management Systems**

Contractor line managers at appropriate levels within the organization understand and synthesize program goals and risks in order to effectively deploy resources to adequately address both. Review Laboratory's process to achieve safety program targets. Evaluate the performance of the worker injury management program (recordkeeping, data analysis, feedback mechanisms, etc.) for lab-wide and departmental programs. Review incidents reports to determine whether staffing and support were causal factors in worker injuries.

5. **Identification of Safety Standards and Requirements and Analyze the Hazards**

Guiding Principle #5: *"Before Work Is Performed, the Associated Hazards Shall Be Evaluated and an Agreed Upon Set of Safety Standards Shall Be Established That, if Properly Implemented, Will Provide Adequate Assurance That the Public, the Workers, and the Environment Are Protected from Adverse Consequences."*

Core Function #2: *"Hazards associated with the work are identified, analyzed and categorized."*

a. **Criterion 1: Hazards Analysis and Work Planning**

Prior to the initiation of work, line management identifies, analyzes, and categorizes the hazards associated with the work activity so that the appropriate administrative and engineering controls can be put in place to prevent or mitigate those hazards. Review work processes from SBMS and division/department procedures and compare with recent events and observations.

b. **Criterion 2: Identification of Standards and Requirements**

**ISMS ASSESSMENT FORM
WORKER INJURIES**

Line management has identified, communicated, executed, and monitored all applicable DOE requirements, and Federal, state, and local regulations. Review SBMS and division/department for omissions that may have been factors in recent events. Assess the subject areas for clarity and technical adequacy?

6. Hazard Controls Tailored to Work Being Performed; Develop and Implement Hazard Controls

Guiding Principle #6: *“Administrative and Engineering Controls To Prevent and Mitigate Hazards Shall Be Tailored to the Work Performed and Associated Hazards.”*

Core Function #3: *“Applicable Standards and Requirements are Identified and Agreed Upon, Controls to Prevent/Mitigate Hazards are Identified, the Safety Envelope Established, and Controls are Implemented.”*

a. Criterion 1: Identify Controls to Prevent/Mitigate Hazards

Line management has established processes for identifying and tailoring controls for hazards associated with all facilities, operations and activities. Review Laboratory's process for identifying and tailoring controls that may have been less than adequate in recent incidents and resulted in injuries.

b. Criterion 2: Establish Safety Controls

Hazard controls are established based on the understanding of the hazards, vulnerabilities, and risks in the work environment (e.g., nuclear, radiological, chemical, industrial, physical, and natural phenomena). Review Laboratory's process for establishing safety controls that may have been less than adequate in recent incidents and resulted in injuries.

c. Criterion 3: Implement Controls

Line management has established methods to implement controls at every level and which ensure that controls remain in effect as long as hazards are present. Review Laboratory's investigations and conduct observations to determine if implementation of controls has been less than adequate in recent incidents.

7. Operations Authorization; Perform Work Within Controls

Guiding Principle #7: *“The Conditions and Requirements to be Satisfied for Operations Initiated and Conducted Shall Be Clearly Established and Agreed-Upon.”*

Core Function #4: *“Readiness is Confirmed and Work is Performed Safely.”*

a. Criterion 1: Confirm Readiness

Line management has established and implemented processes to confirm that a facility or work process/activity, as well as the work force, are in an adequate state of readiness prior to authorizing the performance of work. Review the Laboratory's process for assuring that work preparation is adequate. Conduct work observation and review documentation at work site. Review recent events to determine whether readiness was a causal factor resulting in injuries.

b. Criterion 2: Operations Authorization

Line management has assumed the responsibility for ensuring that all operations are authorized at a level commensurate with the hazards and has established work authorization processes for both facility- and activity-level operations. All work activities, including maintenance modifications, are subject to authorization

ISMS ASSESSMENT FORM WORKER INJURIES

based on appropriate review of the preparation and readiness to perform work. Review work processes and sample documentation from activities observed in the field. Review events to determine whether proper authorization was a causal factor.

c. Criterion 3: Perform Work Safely

Line managers are responsible for implementing programs in compliance with defined requirements. Line managers ensure that contractors, and subcontractors execute defined requirements in such a manner that employees, the public, and the environment are protected from adverse consequences. Conduct interviews with senior managers, division directors, supervisors, foreman and workers on procedural compliance and their understanding of the effectiveness of the SBMS and division/department implementation procedures. Review reports to determine when procedural compliance was a factor in injuries.

8. Provide Feedback and Continuous Improvement

Core Function #5: *"Feedback Information on the Adequacy of Controls is Gathered, Opportunities for Improving the Definition and Planning of Work are Identified and Implemented, Line and Independent Oversight is Conducted, and, If Necessary Regulatory Enforcement Actions Occur"*

a. Criterion 1: Assessment and Measurement of Performance for Continuous Improvement

Line management has established formalized mechanisms and processes (at the institutional, facility/project, and activity levels) for collecting both qualitative and quantitative information on worker illness and injury performance as the basis for informed management decisions to improve safety performance through assessments, performance measures, and other feedback mechanisms. Conduct interviews with senior and middle managers on the investigation and subsequent tasks associated with injury and illness cases. Review reports for technical adequacy. Evaluate the adequacy of the BSA have injury performance measures that assess program performance and improvement. Determine if the injury performance measures are documented and clearly communicated. Evaluate the effectiveness of BNL requirements for routine analysis of worker injury data to identify areas for improvement. Review the requirements and mechanisms that BSA uses for information collection, analysis, communication to management and tracking.

b. Criterion 2: Follow-up and Correction of Safety Management System Deficiencies

Line management has established a formalized process to capture and track worker injury -related deficiencies and associated corrective actions. Line management has executed mechanisms, such as independent verification and performance-based evaluations, to ensure that corrective actions are timely, complete, and effective. Review Laboratory's process for determining whether the corrective action management system is effective in reducing the probability of repeat events. Sample accident investigation reports and follow-up on corrective action completion and effectiveness. Sample analysis and corrective actions from previous assessments for closure and effectiveness. (Sources of information include Task Force, OSHA findings, etc.)

**ISMS ASSESSMENT FORM
WORKER INJURIES****c. Criterion 3: Lessons Learned**

Line management has established a method to capture worker injury and illness-related deficiencies, to identify causes and generic applicability, and to disseminate lessons learned within and across organizations. Evaluate process and interview line managers and workers on the use and effectiveness of the lessons learned system.

Concerns:**Findings:****Observations:****Noteworthy Practices:****Records Reviewed:****Personnel Interviewed:****Work Observations:****Signatures:**

Maria Dikeakos

Joseph Drago